



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/918,503	08/01/2001	Stefan Wahl	Q65395	3648

7590 11/04/2004

SUGHRUE, MION, ZINN,
MACPEAK & SEAS, PLLC
2100 Pennsylvania Avenue, N.W.
Washington, DC 20037-3213

EXAMINER

SWEARINGEN, JEFFREY R

ART UNIT	PAPER NUMBER
----------	--------------

2145

DATE MAILED: 11/04/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/918,503	Applicant(s) WAHL, STEFAN	
	Examiner Jeffrey R. Swearingen	Art Unit 2145	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 August 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|-----------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>2/2/2004</u> . | 6) <input type="checkbox"/> Other: _____ |

Art Unit: 2145

DETAILED ACTION

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Drawings

The application has been filed without drawings, which are acceptable for examination purposes only. However, formal drawings will be required when and if the application is allowed.

Specification

The following guidelines illustrate the preferred layout for the specification of a utility application. These guidelines are suggested for the applicant's use.

Arrangement of the Specification

As provided in 37 CFR 1.77(b), the specification of a utility application should include the following sections in order. Each of the lettered items should appear in upper case, without underlining or bold type, as a section heading. If no text follows the section heading, the phrase "Not Applicable" should follow the section heading:

- (a) TITLE OF THE INVENTION.
- (b) CROSS-REFERENCE TO RELATED APPLICATIONS.
- (c) STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT.
- (d) INCORPORATION-BY-REFERENCE OF MATERIAL SUBMITTED ON A COMPACT DISC (See 37 CFR 1.52(e)(5) and MPEP 608.05. Computer program listings (37 CFR 1.96(c)), "Sequence Listings" (37 CFR 1.821(c)), and tables having more than 50 pages of text are permitted to be submitted on compact discs.) or REFERENCE TO A "MICROFICHE APPENDIX" (See MPEP § 608.05(a). "Microfiche Appendices" were accepted by the Office until March 1, 2001.)
- (e) BACKGROUND OF THE INVENTION.
 - (1) Field of the Invention.
 - (2) Description of Related Art including information disclosed under 37 CFR 1.97 and 1.98.
- (f) BRIEF SUMMARY OF THE INVENTION.
- (g) BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWING(S).
- (h) DETAILED DESCRIPTION OF THE INVENTION.
- (i) CLAIM OR CLAIMS (commencing on a separate sheet).
- (j) ABSTRACT OF THE DISCLOSURE (commencing on a separate sheet).
- (k) SEQUENCE LISTING (See MPEP § 2424 and 37 CFR 1.821-1.825. A "Sequence Listing" is required on paper if the application discloses a nucleotide or amino acid sequence as defined in 37 CFR 1.821(a) and if the required "Sequence Listing" is not submitted as an electronic document on compact disc).

2. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

The following title is suggested: Method of Supplying Alternative Quality of Service Management.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Art Unit: 2145

4. **Claims 11-12** rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
5. **Claims 11-12** refer to a terminal. Claim 11 defines terminal as a *data carrier with a computer program*. Data carrier is broad and undefined. It is unclear what scope of coverage is sought by Applicant. A piece of paper can fit the definition of data carrier as given in claim 11. Applicant is strongly advised to clearly define data carrier. Claim 12 further defines terminal as *a cable modem, a personal computer, a telephone, a television set, a radio station or a mobile radio unit*. It is unclear how a data carrier with a computer program can be a cable modem, a personal computer, a telephone, a television set, a radio station or a mobile radio unit. Applicant is advised to avoid any modifications involving new matter.
6. For purposes of compact prosecution claim 11 is treated as *a computer program according to claim 9*. For purposes of compact prosecution claim 12 is treated as *a terminal comprising a personal computer*.

Claim Rejections - 35 USC § 101

7. 35 U.S.C. 101 reads as follows:
- Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.
8. **Claims 9-13** rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.
9. Regarding **claims 9-13**, Applicant describes only a program and fails to define a structural and functional interrelationship between the program and the computer hardware. The claims equate merely to a program per se, which does not serve a specific function, nor provide functionality to obtain any type of recited utility. Additionally, no storage medium for the computer program has been specified, e.g. embodiment on a computer-readable medium. A signal bearing medium is not necessarily a computer-readable medium, regardless of whether the program contained within said signal bearing medium is executable by a computer. Likewise, a data carrier is not necessarily a computer-readable medium. Because the program is not on a computer-readable medium, it is considered non-statutory. See MPEP 2106(IB)(B)(1)(a). Even in cases where nonfunctional descriptive material is recorded on some

Art Unit: 2145

computer-readable medium, it is not statutory since no requisite functionality is present to satisfy the practical application requirement. Merely claiming nonfunctional descriptive material stored in a computer-readable medium does not make it statutory. Such a result would exalt form over substance. See *In re Sarkar*, 588 F.2d 1330, 1330, 200 USPQ 132, 137 (CCPA 1978). "Nonfunctional descriptive material" includes but is not limited to music, literary works and a compilation or mere arrangement of data, i.e. a program, such as the one claimed. Where certain types of descriptive material, such as music, literature, art, photographs and mere arrangements or compilations of facts or data, are merely stored so as to be read or outputted by a computer without creating any functional interrelationship, either as part of the stored data or as part of the computing processes performed by the computer, then such descriptive material alone does not impart functionality either to the program, or to the computer. See MPEP 2106(IV)(B)(1)(b). The invention, as presently claimed, clearly recites a program without a hardware relationship allowing said program to be stored in order for said program to be executed by a computer. Examiner suggests that Applicant amend claims 9-13 to utilize a "computer-readable medium" in order to overcome the rejection based upon 35 U.S.C. 101.

Claim Rejections - 35 USC § 102

10. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

11. **Claims 1-3, 6, 8-11, 13** rejected under 35 U.S.C. 102(e) as being anticipated by Hattori et al.

(U.S. Patent No. 6,094,674).

12. Regarding **claim 1**, Hattori discloses *a method of supplying a service or an application, comprising the steps: a service required by a customer or an application required by the customer is linked to a QoS category selected by the customer and the required service or the required application is supplied to the customer with the QoS category selected by the customer* (Hattori discloses a customer

Art Unit: 2145

selecting a service and choosing the QoS to provide the service. See Figures 10 and 11. See Abstract. See column 3, lines 36-53. See column 4, lines 36-67.). By this rationale **claim 1** is rejected.

13. Regarding **claim 2**, Hattori discloses *a request to supply a service or an application is received from a terminal of the customer, a request to select one of at least two QoS categories is transmitted to the customer, the selected QoS category is received from the terminal and the requested service or the requested application is supplied with the selected QoS category* (See column 13, lines 1-21. See Figure 11. See Abstract.). By this rationale **claim 2** is rejected.

14. Regarding **claim 3**, the limitations of this claim are substantially the same as those in claim 2. Therefore the same rationale for rejecting claim 2 is used to reject claim 3. By this rationale **claim 3** is rejected.

15. Regarding **claim 6**, the limitations of this claim are substantially the same as those in claim 1. Therefore the same rationale for rejecting claim 1 is used to reject claim 6. By this rationale **claim 6** is rejected.

16. Regarding **claim 8**, Hattori discloses *said mainframe being structured as a resources management unit, a head end or a base station* (Hattori discloses an information processing system with an agent function that controls apparatuses and supervises performance. Examiner considers this a resources management unit. See Hattori, column 2, lines 33-61). By this rationale **claim 8** is rejected.

17. Regarding **claim 9**, Hattori discloses *enable selection of at least one QoS category when the computer program is run on a computer* (See Hattori, Figure 11. See Hattori, Abstract. See Hattori, column 13, lines 1-10.). By this rationale **claim 9** is rejected.

18. Regarding **claim 10**, Hattori discloses *enabling selection of parameters of at least one QoS category* (Hattori teaches a "set details" QoS option where the user defines the communication route selection. See Hattori, column 13, lines 15-16.). By this rationale **claim 10** is rejected.

19. Regarding **claim 11**, the limitations of this claim are substantially the same as those in claim 9. Therefore the same rationale for rejecting claim 9 is used to reject claim 11. By this rationale **claim 11** is rejected.

Art Unit: 2145

20. Regarding **claim 13**, the limitations of this claim are substantially the same as those in claim 1. Therefore the same rationale for rejecting claim 1 is used to reject claim 13. By this rationale **claim 13** is rejected.

Claim Rejections - 35 USC § 103

21. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

22. **Claims 4 and 7** rejected under 35 U.S.C. 103(a) as being unpatentable over Hattori in view of Yamamura et al. (U.S. Patent No. 6,028,838).

23. Regarding **claim 4**, Hattori is applied as in claim 1. Hattori fails to disclose *a saved pre-selection of a QoS category by the customer is accessed, the service required by the customer or the application required by the customer is linked to the QoS category pre-selected by the customer and the required service or the required application is supplied to the customer with the QoS category selected by the customer.*

24. Yamamura discloses *a saved pre-selection of a QoS category by the customer is accessed, the service required by the customer or the application required by the customer is linked to the QoS category pre-selected by the customer and the required service or the required application is supplied to the customer with the QoS category selected by the customer.* [See Yamamura, column 3, line 65 – column 4, line 5. See Yamamura, figure 7, item 49. See Yamamura, figure 10B.]

25. It would have been obvious to one of ordinary skill in the networking art at the time of the invention to pre-determine a service as taught by Yamamura in a QoS selection system taught by Hattori for the purpose of efficiently selecting a service provider [See Yamamura, column 10, line 18-25]. Hattori gives motivation to combine the two teachings by stating that the user interface handles connections based on the user's operation procedure [see Hattori, column 7, line 24-column 8, line 17]. By this rationale, **claim 4** is rejected.

26. Regarding **claim 7**, the limitations of this claim are substantially the same as those in claim 4. Therefore the same rationale for rejecting claim 4 is used to reject claim 7. By this rationale **claim 7** is rejected.

Art Unit: 2145

27. **Claim 5** rejected under 35 U.S.C. 103(a) as being unpatentable over Hattori in view of Yamato et al. (U.S. Patent No. 6,094,431).

28. Regarding **claim 5**, Hattori is applied as in claim 1. Hattori fails to disclose *a supplied QoS category can be changed by the customer during the period of supply or an application by transmitting a new QoS category*.

29. However, Yamato teaches *a supplied QoS category can be changed by the customer during the period of supply or an application by transmitting a new QoS category* [Yamato teaches changing the amount of resource reserved in a virtual connection for transferring data packets. See Yamato, column 3, lines 37-56].

30. It was obvious to one of ordinary skill in the networking art at the time of the invention to combine Yamato's teaching of altering the QoS of a connection with the teachings of Hattori because of a problem with undesirable increase of packet transfer delay [See Yamato, column 2, lines 28-43]. Hattori gives motivation to combine the references by stating that the content of the services delivered to the users can be altered [Examiner considers content of the service to include QoS parameters. See Hattori, column 20, lines 47-60]. By this rationale **claim 5** is rejected.

31. **Claim 12** rejected under 35 U.S.C. 103(a) as being unpatentable over Hattori in view of How Networks Work.

32. Regarding **claim 12**, Hattori is applied as in claim 11. Hattori fails to disclose that a terminal can be comprised of *a cable modem, a personal computer, a telephone, a television set, a radio station, or a mobile radio unit*.

33. However, How Networks Work discloses that a personal computer can function as a terminal. (See pages 62-63.).

34. It would have been obvious to one of ordinary skill in the networking art at the time the invention was made to use a personal computer as a terminal in the invention described by Hattori since How Networks Work teaches a personal computer can function as a terminal and as an access point to a mainframe or server (see How Networks Work, page 63). Hattori gives motivation to combine the references by stating that terminals connect to servers (see Hattori, column 9, lines 39-59). By this rationale **claim 12** is rejected.

Conclusion

Art Unit: 2145

35. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Jordan, Scott and Hong Jiang. "Connection Establishment in High-Speed Networks". IEEE Journal on Selected Areas in Communications, Vol. 13, No. 7. September 1995. pp. 1150-1161.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeffrey R. Swearingen whose telephone number is (571) 272-3921. The examiner can normally be reached on M-F 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wiley can be reached on (571) 272-3923. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Jeffrey R. Swearingen
Examiner
Art Unit 2145

JRS

William C. Vaughn Jr.
Primary Examiner
Art Unit 2143
William C. Vaughn Jr.